

Question	Answer
10.	
11.	$X(-24, 0); \frac{8}{3}$
12.	$K(0, 10); \frac{5}{8}$
13.	$DE = 2\sqrt{5}, DG = 3\sqrt{5}, DF = 4\sqrt{2},$ and $DH = 6\sqrt{2},$ so $\frac{DE}{DG} = \frac{DF}{DH} = \frac{2}{3}.$ $\angle D \cong \angle D$ by the Reflex. Prop. of $\cong.$ So $\triangle DEF$ $\sim \triangle DGH$ by SAS $\sim.$
14.	$MN = 5\sqrt{5}, MQ = 10\sqrt{5}, MP = 5\sqrt{10},$ and $MR = 10\sqrt{10},$ so $\frac{MN}{MQ} = \frac{MP}{MR} = \frac{1}{2}.$ $\angle M \cong \angle M$ by the Reflex. Prop. of $\cong.$ So $\triangle MNP \sim \triangle MQR$ by SAS $\sim.$
15.	Check students' work. The image of $\triangle JKL$ has vertices $J'(-6, 0),$ $K'(-3, -3),$ and $L'(-9, -6).$ $JK = \sqrt{2},$ $JL = \sqrt{5},$ and $LK = \sqrt{5}.$ $J'K' = 3\sqrt{2},$ $J'L' = 3\sqrt{5},$ and $L'K' = 3\sqrt{5}.$ $\frac{J'K'}{JK} = \frac{J'L'}{JL}$ $= \frac{L'K'}{LK} = 3.$ So $\triangle JKL \sim \triangle J'K'L'$ by SSS $\sim.$

Question	Answer
16.	<p>Check students' work. The image of $\triangle MNP$ has vertices $M'(0, 2)$, $N'(2, 1)$, and $P'(1, -1)$. $MN = 2\sqrt{5}$, $MP = 2\sqrt{10}$, and $PN = 2\sqrt{5}$. $M'N' = \sqrt{5}$, $M'P' = \sqrt{10}$, and $P'N' = \sqrt{5}$. $\frac{M'N'}{MN} = \frac{M'P'}{MP} = \frac{P'N'}{PN} = \frac{1}{2}$. So $\triangle MNP \sim \triangle M'N'P'$ by SSS \sim.</p>
18.	<p>Solution B is incorrect. Scale factor is ratio of a lin. measure of image to corr. lin. measure of preimage, so scale factor is $\frac{UW}{RT} = \frac{3}{2}$.</p>
20a.	<p>He should use the origin as the vertex of the rt. \angle; $J(0, 1)$; $K(0, 0)$; $L(3, 0)$.</p>
20b.	